

Volume 21 Number 1

HAZMATTERS





A MESSAGE FROM THE PRESIDENT, LARRY SCHUMER, CHMM

Dear Fellow Chapter Members,

Your Chapter is off to a rousing start in 2012.

In January the 2012 Board was installed and the 2012 *Chapter Operating Plan* approved.

Your new Board is:

- Lawrence Schumer, CHMM: *Tetra Tech, Inc.*, President
- Michelle Baker, CHMM: *Zeon Chemicals L.P.*, Vice President
- Andrew Clifton, CHMM: *Microbac Laboratories, Inc.*, Treasurer
- Jennifer Triplett, CHMM: *Environmental Compliance Source LLC*, Secretary
- Bruce Gaylord, PG, QEP, CHMM: *Republic Conduit*, Director
- Corrine Greenberg, CHMM: *Industrial Container Services-KY*, Director
- Tom Herman, PE: *Zeon Chemicals, L.P.*, Director
- Mark Hussung, CHMM: *Patriot Engineering & Environmental, Inc.*, Director
- Ralph McCord, PE: *Louisville Water Company*, Director
- Celeste Sutter, CHMM: *Hanover College*, Past President

Our January meeting provided Gary H. Revlett, Director Environmental Affairs Department, LG&E and KU Energy providing an informative discussion of a number of new Federal air, water and waste initiatives that will impact electric utilities and our electric bills.

February delivered 11 continuing or new committee chairs and development of their 2012 plans to deliver greater value to our members and to grow KCHMM. Our committees include: Credentials, Education, Legislative Affairs, Membership, Nominations, Outreach, [Social & Technical] Programs, Publications, Rachel Davis [Endowment], Stewardship and Website. Committees and their functions in The Summer edition will provide the mission and leadership of each committee and their upcoming activities.

March brought the Chapter's continued strong support for the Intel Louisville Regional Science Fair with six (6) KCHMM judges (Sandy Tucker, Mark Spaulding, Mark Hussung and Andrew Clifton) lead by Corinne Greenberg. KCHMM voted for the second year in a row to fund a Special Award for a student presenting in

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ISSUE HIGHLIGHTS:

- Page 3: EPA Announces Plan for Risk Assessments for Existing Chemicals
- Page 4: KCHMM at the Science Fair
- Page 5: May Meeting Invitation
- Page 6: EPA Reissues 2008 Stormwater Construction General Permit for Five Year Term

EPA ANNOUNCES NEW PLAN FOR IDENTIFYING EXISTING CHEMICALS FOR RISK ASSESSMENT

Submitted by Robert A. Bilott, Taft, Stettinius & Hollister LLP

On March 1, 2012, US EPA announced that it has finalized a new plan for identifying which existing chemicals should undergo comprehensive risk assessment under the Toxic Substances Control Act (TSCA). US EPA also announced that, using this new plan, it has identified 83 existing chemicals for further risk assessment, with 7 of those chemicals slated for assessments in 2012. US EPA first initiated stakeholder discussion on how best to address future risk assessments last fall when it asked for public comment through an on-line forum, webinar, and stakeholder meeting on its August 2011 two-step plan for identifying existing chemicals for risk assessment.

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A Message From the President, continued from page 2:

the "Environmental Management" or "Environmental Sciences" categories selected by our panel of judges. As in 2011 the Board provided a \$200 base award to be supplemented by the generosity of our members' contributions at our dinner meetings since the 2011 fair. Our goal is to exceed the \$300 KCHMM awarded in 2011. In March we also held our second meeting featuring guest speaker Robert Bilott, a Partner with Taft Stettinius & Hollister LLP, who provided insight into the USEPA's New Chemical Data Reporting Rule.

April brings additional Outreach /Stewardship activity for two important KCHMM activities. On April 22nd KCHMM will again host an activity booth at the Zoo's Earth Day celebration. In 2011 we hosted over 250 children participating in environmental activities at our booth. Also April brings a flurry of activity to prepare for KCHMM to staff a booth for the first time at the 28th Governor's Health and Safety Conference to be held at the Galt House, May 8-11, 2012. Both of these upcoming activities and others throughout 2012, as well as our eleven committees offer you the opportunity to share your EHS expertise, connect with fellow members and to give back to our community. If you would like to contribute your expertise and enthusiasm or have suggestions for ways to improve the value of our membership, please contact any of your Board members.

Thank you to all for your continued support and I look forward to seeing you at our May 9th Dinner Meeting@ Ramada Inn Downtown, Zorn Ave and River Road for the 5:30 PM social hour.

Larry Schumer, CHMM
KCHMM President

KCHMM AND THE LOUISVILLE REGIONAL SCIENCE FAIR

Submitted by **Corrinne Greenberg**

Science **is** fun! And Saturday's fair was no exception.

This year, KCHMM's participation was down just a bit. We sent five judges, as follows:

Environmental Management: Corinne Greenberg, Sandy Tucker

Environmental Science: Mark Hussung, Mark Spaulding

Chemistry: Andrew Clifton

These five are in addition to Chapter member **Gary Spanyer**, who, once again, tackled the demanding but critical job of coordinating all the judges for the fair.

As far as the KCHMM award goes, there were five high school projects in "Environmental Management," and four high school projects in "Environmental Science." (We also judged three junior high EM projects & six junior high ES projects, but our award criteria limited us to the nine high school exhibitors.) After much consideration and deliberation, the combined EM / ES judging team narrowed the field down to two students. We discussed the relative merits of both these fine projects and ultimately we awarded the KCHMM special award to 9th grader **Cooper Sodano** in the EM category for his project entitled "**Oil and Feathers Don't Mix.**"

Cooper tested the relative efficacy of four eco-friendly cleaning solutions – Dawn dish soap, a vinegar/water solution, a baking soda/water solution, and Johnson's Baby Shampoo – on sample sets each consisting of 10 untreated craft feathers that had been soaked for an equivalent period of time in 10W30 motor oil. He weighed each feather (40 samples total) prior to exposure to oil, after being soaked, and after being dried after treatment. He treated each contaminated feather by applying the test solution with a toothbrush, rinsing each, and then laying them out to fully dry. He found that Dawn dish soap is >99% effective in removing the oil from the feathers!

What impressed us the most about Cooper's project was his absolutely complete and consistent methodology. While the scope of his project was fairly straight-forward and somewhat simple, he executed it exceedingly well. Neither his methodology nor his results left any of the judging team with any questions. We chose to award the KCHMM award to Cooper because of his exacting level of detail and a job done very thoroughly. Cooper displayed the desired traits of an attentive scientist-in-the-making and will some day be a great addition to somebody's staff! (I'm hopeful that puts him in KCHMM in 10 or 15 years!)

Having said that, we hope we will see him at KCHMM much sooner. In the award letter, we invited Cooper and a parent or teacher to our May 9 meeting, where he will be setting up his display for our members to see, and we will present him with the \$300 stipend during our business meeting.

NEXT KCHMM MEEETING, WED MAY 9, 2012, RAMADA DOWNTOWN NORTH

Please RSVP by Noon, Friday, May 4th @ RSVP@KCHMM.org

**Technical Presentation:
“Nuts & Bolts of Stack Testing”**

The presentation will briefly explain the science of stack testing and address stack design to provide adequate test locations, test port locations and the number of ports, basic requirements and resources to conduct a test, EPA test methods, and common emission calculations. This stack test primer will serve as an excellent refresher for all interested in, or involved with, source testing.

Presenter: Michael M. Dicens, Director, Air Analysis Division of Astbury Environmental Engineering, Inc.

Michael has twenty-one (21) years of experience in the environmental regulatory and consulting business of which, seven years was as Environmental Manager with the Indiana Department of Environmental Management (IDEM). Two of those years at IDEM were with the Section of Air Enforcement. The remaining years were with the Air Compliance Data Section (stack emissions QA group). He formerly served for seven (7) years as President/CEO of Air Analysis, Inc. and for 3 years as Vice-President/Principal with the SESCo Group. Currently Michael serves as Astbury’s Director of the Air Analysis Division-Industrial responsible for managing the firms source testing group. He has completed more than one thousand three hundred (1300) stack emissions test projects.

(Technical session will earn 1 CMP toward renewal of your CHMM, CHMP and/or other professional credentials)

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Location:

1041 Zorn Avenue

Louisville, Kentucky 40207

Phone: 502-897-5101

**Cost: \$25 for each RSVP received before Noon on Friday, May 4th,
\$30 if you do not RSVP (Cannot guarantee dinner availability)**

KCHMM has to guarantee all reservations. Therefore, if you fail to honor your reservation, you will be invoiced \$25. Make checks payable to: KCHMM

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Schedule:

Board Meeting 4:00 – 5:30 PM

Social 5:30 – 6:15 PM

Dinner & Business Meeting 6:15 – 7:00 PM

Technical Presentation 7:00 – 8:00 PM

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Visitors and Colleagues are welcome!

EPA REISSUES AND REPLACES 2008 STORMWATER CONSTRUCTION GENERAL PERMIT FOR FIVE YEAR TERM

Submitted by Kim Burke, Taft Stettinius & Hollister LLP

On February 16, 2012, USEPA reissued and renewed the expiring 2008 Stormwater Construction General Permit (CGP) for a five-year term. The new permit covers stormwater discharges from disturbances of one or more acres of land. EPA states that the CGP is issued to “improve its readability, clarity, and enforceability.” EPA’s Fact Sheet summarizing the 2012 “clarified” CGP is 135 pages long.

New requirements to implement technology-based Effluent Limitation Guidelines and New Source Performance Standards for the construction and development industry were issued on December 1, 2009 (the “C&D Rule”), but the numeric turbidity discharge limits are currently stayed indefinitely¹. Therefore, new non-numeric performance standards apply under the 2012 CGP for C&D sites²:

- (i) erosion and sediment controls,
- (ii) soil stabilization,
- (iii) dewatering,
- (iv) pollution prevention measures,
- (v) prohibited discharges, and
- (vi) surface outlets.

The 2012 CGP includes new provisions that apply to:

- (i) eligibility for emergency-related construction;
- (ii) ineligibility for coverage for sites using certain treatment chemicals;
- (iii) increased usage of the electronic Notice of Intent process³;
- (iv) sediment and erosion controls;
- (v) natural buffers or alternative controls;
- (vi) water quality-based effluent limits;
- (vii) site inspections⁴;
- (viii) corrective action⁵;
- (ix) stormwater pollution prevention plans (SWPPPs); and
- (x) permit termination⁶.

Because USEPA is the permitting authority in only a limited number of states, construction and development activity managers should determine the applicability of the 2012 CGP for the state governing their project, and verify the status and implementing procedures of the 2012 CGP by those states with delegated NPDES permitting authority.

1-The numeric turbidity limits (stayed as of January 4, 2011) apply to sites disturbing 10 or more acres. 40 C.F.R. § 450.22.

2-40 C.F.R. § 450.21.

3-EPA increased the NOI waiting period from 7 to 14 days.

4-The frequency of site inspections for storm-based schedules increases under the 2012 CGP due to the trigger being lowered from a 0.5 inch storm event to a 0.25 inch storm event.

5-The final permit includes specific triggering conditions for corrective action as well as deadlines to fix problems and document corrective actions.

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EPA ANNOUNCES NEW PLAN FOR IDENTIFYING EXISTING CHEMICALS FOR RISK ASSESSMENT

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As noted in the final plan announced and posted on USEPA's website, the first step of the plan identifies potential risk assessment candidates through evaluation of the following factors: carcinogenicity; PBT factors (persistence, bioaccumulation, and toxicity); children's health; neurotoxicity; children's product use; and biomonitoring status. Over 1200 chemicals were identified through this initial step. US EPA then removed from that list chemicals that "did not meet the intent of the prioritization criteria, they were not subject to action under TSCA, or they were already the subject of TSCA action." Chemicals removed through that screening process included: pesticides; drugs, hormones, and pharmacological chemicals; certain radiological materials; complex process streams, byproducts not commercially produced; polymers; gases, common naturally occurring chemicals, and combustion products; common oils or fats and simple plant extracts; explosive, pyrophoric, or extremely reactive or corrosive chemicals; metals principally identified as toxic to the environment; and chemicals already the subject of Action Plans or significant regulation under TSCA (Benzidine Dyes, BPA, HBCD, MDI, Nonylphenol and Nonylphenol Ethoxylates, PBDEs, PCBs, PFCs, Phthalates, Short-chain Chlorinated Paraffins, and TDI). After removing such chemicals, 345 chemicals remained at the end of the first step of the screening plan.

For the second step of the screening plan, US EPA applied a numeric algorithm to derive "scores" for the chemicals based on: hazard; exposure; and potential for persistence and bioaccumulation. The "Hazard" score was based on evaluation of both human health and environmental toxicity concerns using US EPA's Alternatives Assessment Criteria for Hazard Evaluation. The "Exposure" score was based on evaluation of chemical use, general population and environmental exposures, and release information, including information from US EPA's Toxics Release Inventory (TRI) and Inventory Update Reporting data (IUR - now called Chemical Data Reporting (CDR)). The "Persistence/Bioaccumulation" score was based on evaluation of chemical half-life and bioaccumulation/bioconcentration (measured or estimated BAF/BCF) data or similar calculations. The total Hazard, Exposure, and Persistence/Bioaccumulation scores for the chemicals under review were then sorted into overall "High," "Moderate," and "Low" groups. Through this process, 83 chemicals received "High" rankings and have, therefore, been designated as the first TSCA Work Plan Chemicals. The complete list of these 83 chemicals is available at USEPA's website.

Of the initial 83 TSCA Work Plan Chemicals, US EPA then selected 7 chemicals for risk assessment in 2012, based on evaluation of the following factors: 1) Whether the chemical was ranked "High"; 2) Whether the chemical reflects more than one of the factors identified in step one of the plan; 3) Whether the chemical might benefit from some preliminary work to assure that the risk assessment is targeted and scoped appropriately; 4) Whether the chemical is the subject of an existing assessment; and 5) Agency work load considerations, including timing of work needed on specific chemicals and existing commitments for assessment. The 7 chemicals identified for TSCA risk assessment during 2012 are:

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EPA ANNOUNCES NEW PLAN FOR IDENTIFYING EXISTING CHEMICALS FOR RISK ASSESSMENT

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1. Antimony & Antimony Compounds
2. 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8,-hexamethylcyclopenta [g]-2-benzopyran (HHCB)
3. Long-Chain Chlorinated Paraffins (C18-20)
4. Medium-Chain Chlorinated Paraffins (C14-17)
5. Methylene Chloride
6. N-Methylpyrrolidone
7. Trichloroethylene (TCE)

As for the function of the upcoming risk assessment work, US EPA stated in its new "Existing Chemicals Program: Strategy" document that its chemical assessments "may include evaluation of alternatives. If an assessment indicates significant risk, EPA will evaluate and pursue appropriate risk reduction actions. If an assessment indicates no significant risk, EPA will conclude its current work on that chemical." US EPA also noted that "additional chemicals will be added to the work plan as more data are developed and more chemicals screened."